Chlamydia
(*C. trachomatis)*

I. INTRODUCTION AND SCREENING RECOMMENDATIONS

Chlamydial genital infection is the most prevalent STI in the United States and prevalence is highest in persons aged ≤25 years. Important sequelae can result from *C. trachomatis (Ct)* infection in women, the most serious of which include Pelvic Inflammatory Disease (PID), ectopic pregnancy, and infertility. Asymptomatic infection is common among both men and women.

Annual screening of all sexually active women aged 24 years and under is recommended, as is screening of older women with risk factors (infected partner, symptoms, history of STI or multiple partners in the last year).

Men should be screened at sites with a high prevalence of chlamydia (adolescent clinics, correctional facilities, and STI clinics). Additionally, men who have sex with men, men with symptoms suggestive of chlamydia (urethral discharge or dysuria), and men whose partner has chlamydia should be tested. A urethral and rectal specimen is recommended. Men with chlamydia should also be re-screened for re-infection 3 months following treatment.

II. HISTORY AND EVALUATION

A. History may include:
   1. Previous *C. trachomatis* infection
   2. Recent change in sexual partner
   3. Partner with symptoms of *C. trachomatis*
   4. Lack of STI protection (condom use)
   5. Report of multiple sexual partners
   6. Symptoms of *C. trachomatis*
   7. Infected partner

B. Symptoms may include (Note: men and women with *C. trachomatis* infection may not have symptoms until the infection is advanced. Symptoms may also be similar to that of Gonorrhea):
   1. In Women
      a. Dysuria
      b. Abdominal Pain
   2. In Men
      a. Dysuria
      b. Epididymitis
      c. Testicular Pain

C. Physical exam findings may include
   1. In women: Mucopurulent, endocervical discharge, with edema, erythema and endocervical bleeding
   2. In men: Discharge from penis

III. DIAGNOSIS

Diagnosis is made by positive urine, urethral, cervical, vaginal or rectal swab preferably using Nucleic Acid Amplification Test (NAAT).

IV. TREATMENT

A. Clients with a positive test result or patients with symptoms and/or sexual contact with confirmed positive partner should be treated following the most recent CDC Sexually Transmitted Diseases Treatment Guidelines which can be accessed at CDC website: http://www.cdc.gov/std/treatment/default.htm
B. To maximize compliance with recommended therapies, medications for chlamydial infections should be dispensed on site, and the first dose should be directly observed.
C. All women with chlamydia infection should be screened for re-infection at 3-months after treatment.
D. Pregnant women should also have a "test-of-cure" 3-4 weeks after treatment, screening for re-infection 3 months following treatment, and if at high risk for re-infection (<25 years of age, new partner, multiple partners), should also be re-tested in the third trimester.
E. Sexual partners should be treated as well. Ideally, partners will be seen and treated directly, but expedited partner treatment (EPT) can also be undertaken.
    a. EPT is the clinical practice of treating the sex partners of patients diagnosed with chlamydia or gonorrhea by providing prescriptions or medications to the patient to take to his/her partner without the health care provider first examining the partner.
    b. For partners who are unlikely to access timely evaluation and treatment, the CDC recommends EPT (via a prescription provided to client or to partner).
    c. In Maryland, EPT can be provided either by treatment directly with medications, or by providing a prescription. Details regarding Maryland's EPT program/law can be found at: http://phpa.dhmh.maryland.gov/OIDPCS/CSTIP/Pages/Expedited%20Partner%20Therapy.aspx
    d. Medication or prescriptions provided as part of EPT should be accompanied by treatment instructions, appropriate warnings about taking medications (if the partner is pregnant or has an allergy to the medication), general chlamydia health education and counseling, and a statement advising that partners seek personal medical evaluation, particularly women with symptoms of PID.

V. SPECIAL TREATMENT CONSIDERATIONS

B. Pregnancy: Doxycycline, ofloxacin, and levofloxacin are contraindicated in pregnant women. Azithromycin is safe and effective. Repeat testing 3 to 4 weeks after completion of therapy with the following regimens is recommended

for all pregnant women to ensure therapeutic cure. Pregnant women diagnosed with a chlamydial infection during the first trimester should receive a test 3-4 weeks after completion of treatment to document chlamydial eradication, AND be retested 3 months after treatment to evaluate for re-infection.

C. Of note is that non-pregnant clients do not need a "test of cure" testing (see "Follow-up" section below), but should be tested for re-infection at 3 months following treatment.
D. Men with symptoms suggestive of chlamydia or whose partner has chlamydia should be tested and empirically treated at that visit.

VI. CLIENT EDUCATION/COUNSELING

A. Sexual partner and any sexual contacts in the last 60 days preceding onset of symptoms or diagnosis must be informed of possible infection and provided with written materials about the importance of seeking evaluation for any symptoms suggestive of complications (e.g., testicular pain in men and pelvic or abdominal pain in women).
B. Timely treatment of sex partners is essential for decreasing the risk for re-infection.
C. Patients should be instructed to abstain from sexual intercourse until they and their sex partners have completed treatment. Abstinence should be continued until 7 days after a single-dose regimen or after completion of a multiple-dose regimen.
D. Provide a medication information sheet.
E. Provide STI education and information.
F. Provide current educational information on *C. trachomatis*.
G. Provide contraceptive information, as indicated.
H. Encourage consistent and correct condom use to prevent STIs.

VII. FOLLOW-UP

A. Except in pregnant women, test-of-cure (i.e., repeat testing 3–4 weeks after completing therapy) is **not** advised for persons treated with the recommended or alterative regimens, unless therapeutic compliance is in question, symptoms persist, or re-infection is suspected.
B. Clients that had a chlamydial infection should be retested approximately 3 months after treatment to ensure that they are not re-infected. If retesting was not done at 3 months, clinicians should retest whenever the client next presents for medical care in the 12 months following initial treatment.
C. The following patients should be referred to the medical director or other provider as appropriate:
    1. Clients with multiple re-infections
    2. Pregnant clients – (refer to prenatal care)

VIII. REPORTING

Maryland law requires provider and laboratory reporting of all cases of chlamydial infection. Reporting instructions and forms can be accessed via the Maryland DHMH: http://phpa.dhmh.maryland.gov/Pages/reportable-diseases.aspx

REFERENCES:

CDC: Sexually Transmitted Disease Treatment Guidelines, 2015